

FIG. 1

FIG. 2

2/5

Computer Network
e.g. WAN or Internet
IP
ATM
FR
PPP
SNA
VoIP
etc.

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106A

120 e.g. TCP/IP

122 e.g. analog voice

124 e.g. digital voice

126 LAN

128 216 1-N

130 218 1-N

140 ATM

142 FR

144 PPP

146 SNA

148 VOIP

...

Core Processing Engine 230

Central Processing Unit (CPU) 232

Cache Memory 233

Memory 234

Cache Memory 235

Optimizer 240

Analyzer 210

Analyzer-1 212

Analyzer-2 214

218 1-N

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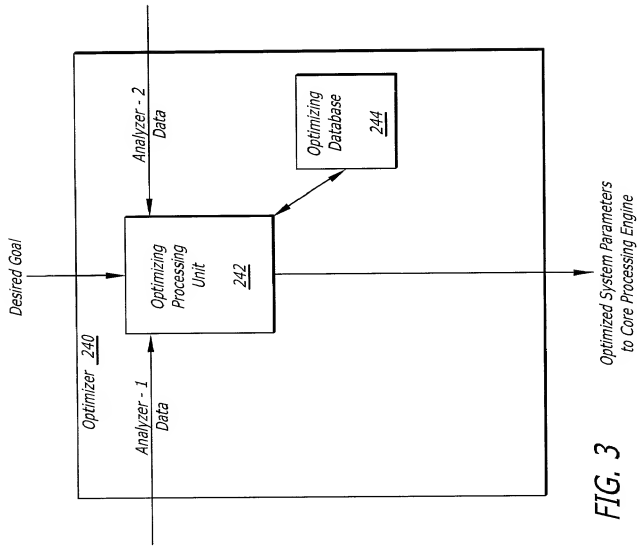


FIG. 3

Optimized System Parameters
to Core Processing Engine

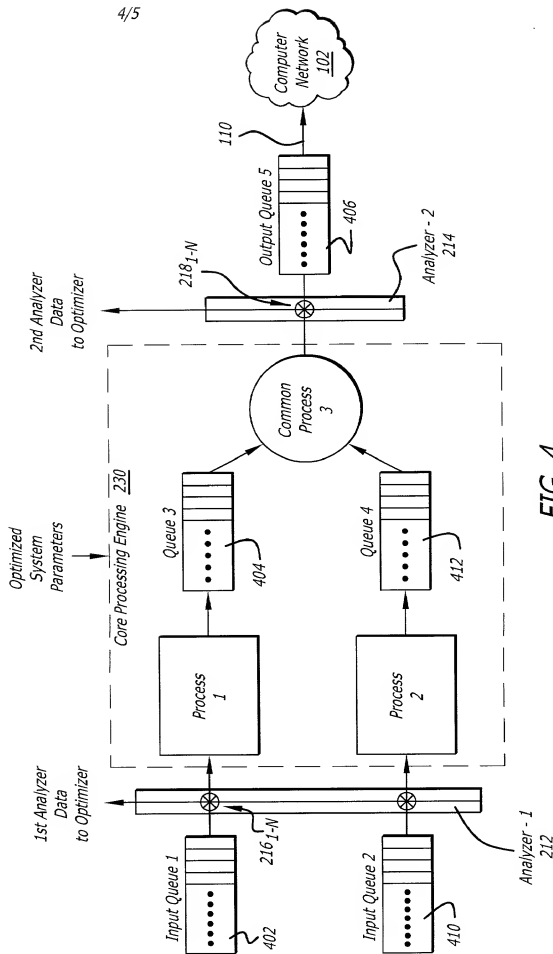


FIG. 4

Goal	Queue 1	Process 1	Queue 3	Process 3	Queue 5	Queue 2	Process 2	Queue 4
ROW 1 1	Queue 1 = Voice (High Priority)	High Scheduling Priority Large CPU Allocation Large Cache Allocation	Queue = Small	High Scheduling Priority Favor Queue 3 Large CPU Allocation Large Cache Allocation If Congestion Discard Queue 4	Queue = Small	Queue = Large	Low Scheduling Priority Small CPU Allocation Small Cache Allocation	Queue = Large
	Queue 2 = Financial Data via SNA (Low Priority)							
ROW 2 2	Queue 2 = Financial Data via SNA (High Priority)	Low Scheduling Priority Small CPU Allocation Small Cache Allocation	Queue = Large	High Scheduling Priority Favor Queue 4 Large CPU Allocation Large Cache Allocation If Congestion Discard Other Queue	Queue = Large	Queue = Large	High Scheduling Priority Large CPU Allocation Large Cache Allocation	Queue = Large
	Queue 1 = Internet Traffic via IP (Low Priority)							

FIG. 5